

Listing of the claim(s):

This list of claims will replace all prior versions and listings of claims in the application:

1. (currently amended) ~~Gas discharge lamp, specifically a HID lamp, more specifically a metal halide lamp, most specifically a~~ ~~m~~ Metal halide lamp with an aspect ratio greater than 3 ~~or even 4~~, comprising:

    a discharge chamber having walls sealingly enclosing the discharge chamber;

    two electrodes arranged in the discharge chamber opposite each other, for burning an arc therebetween;

    the discharge chamber containing a saturated system comprising an excess amount of salt, such as for instance metal halides, such that during operation of the lamp, a salt pool of melted salt will be present inside the discharge chamber;

    the lamp being designed such that, when the lamp is operative in a vertical orientation, the location of the salt pool is close to the top of the discharge chamber.

2. (currently amended) ~~Gas discharge~~ ~~Metal halide~~ lamp according to claim 1, wherein the coldest spot is close to the top of the discharge chamber.

3. (currently amended) ~~Metal halide~~ ~~Gas discharge~~ lamp according to claim 1 ~~or 2~~, wherein the lamp is operative in a vertical orientation, an arc heats the ceiling of the discharge chamber to a lesser extent than the bottom or lower cap of the discharge chamber.

4. (currently amended) Metal halide~~Gas discharge~~ lamp according to claim 3, wherein the lower electrode has a point-to-bottom distance that is smaller than the point-to-bottom distance of the upper electrode.
5. (currently amended) Metal halide~~Gas discharge~~ lamp according to claim 4, wherein the lower electrode has a point-to-bottom distance in the order~~within~~ the range of 0-5 mm.
6. (currently amended) Metal halide~~Gas discharge~~ lamp according to claim 1-~~or 2~~, ~~preferably also according to any of claims 3-5~~, wherein the lamp is designed such that heat output close to the ceiling of the discharge chamber is greater than the heat output close to the bottom of the discharge chamber.
7. (currently amended) Metal halide~~Gas discharge~~ lamp according to claim 6, wherein one or more upper lamp components are designed such that their heat transportation capacity is larger than the heat transportation capacity of the corresponding lower lamp components.
8. (currently amended) Metal halide~~Gas discharge~~ lamp according to claim 6-~~or 7~~, further comprising electrode conductors sealingly extending through wall sections of the discharge chamber, wherein the electrode conductor of the top electrode is thicker than the electrode conductor of the lower electrode.
9. (currently amended) Metal halide~~Gas discharge~~ lamp according

to ~~any of claims 6-8~~claim 6, further comprising electrode conductors sealingly extending through wall sections of the discharge chamber, wherein the electrode conductor of the top electrode is made from a material having a larger heat transportation capacity than the material of the electrode conductor of the lower electrode.

10. (currently amended) ~~Metal halide~~Gas discharge lamp according to ~~any of claims 6-9~~claim 6, wherein a wall section of the discharge chamber close to the top electrode is thicker than a wall section of the discharge chamber close to the lower electrode.

11. (currently amended) ~~Metal halide~~Gas discharge lamp according to ~~any of claims 6-10~~claim 6, wherein a wall section of the discharge chamber close to the top electrode is made from a material having a larger heat transportation capacity than the material of a wall section of the discharge chamber close to the lower electrode.

12. (currently amended) ~~Metal halide~~Gas discharge lamp according to ~~any of claims 6-11~~claim 6, wherein the lamp is provided with additional heat discharge means located at the upper end of the discharge chamber.

13. (currently amended) ~~Metal halide~~Gas discharge lamp according to claim 12, wherein said additional heat discharge means comprise suitably configured fins, and/or wherein said additional heat discharge means comprise a radiation layer.

14. (currently amended) Metal halide~~Gas discharge~~ lamp according to ~~any of claims 6-13~~claim 6, wherein the lamp is provided with heat transfer inhibiting means located at the lower end of the discharge chamber.

15. (currently amended) Metal halide~~Gas discharge~~ lamp according to claim 14, wherein said heat transfer inhibiting means comprise a heat shield which is located close to the electrode conductor of the lower electrode and preferably surrounds this electrode conductor, and/or wherein said heat transfer inhibiting means comprise a heat shield which is located close to a lower portion of the discharge chamber and preferably surrounds this lower portion.

16 - 19. (cancelled)

20. (currently amended) Metal halide~~The gas~~ ~~discharge~~ lamp of claim 1, wherein the lamp is provided with additional heat generating means located close to one end of the discharge chamber.

21. (currently amended) Metal halide~~The~~ lamp of claim 20, wherein said additional heat generating means comprises a radiation coil.

22. (currently amended) Metal halide~~The~~ lamp of claim 21, comprising a pair of electrically conductive lamp supports supporting the lamp and supplying power to the lamp, wherein

the radiation coil is also powered by the said lamp supports.